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C L A I M S

1. A cooling device (1) for a fuel-recirculation circuit from the injection system to the tank of a motor vehicle, comprising a pipe (2) designed to be traversed by the fuel and comprising a side wall (5), characterized in that said side wall (5) has at least one internal projection (7) obtained by plastic deformation of said side wall (5).
- 10 2. The cooling device according to Claim 1, characterized in that said pipe (2) is coiled.
- 15 3. The cooling device according to Claim 2, characterized in that said coiled pipe (2) comprises an alternating succession of elbows (3) and rectilinear stretches (4).
- 20 4. The cooling device according to Claim 2 or Claim 3, characterized in that it comprises a plurality of said projections (7).
- 25 5. The cooling device according to Claim 4, characterized in that said projections (7) are made on said rectilinear stretches (4).
- 30 6. The cooling device according to any one of the preceding claims, characterized in that said projection or projections (7) extend longitudinally.
- 35 7. The cooling device according to any one of the preceding claims, characterized in that said side wall (5) is entirely surrounded with a cooling current of air.
8. The cooling device according to any one of the preceding claims, characterized in that it does not comprise a radiating plate connected in a direct thermal exchange manner to said pipe (2).